

Index to Volume 162

ABSORPTION of emulsified mineral oil, 80
Acetone and acetylcholine, 616
Acetylcholine
and acetone, 616
brain content and drugs, 469
effect on permeability of erythrocytes, 610
and pelvic relaxation, 606
Actomyosin and uterine motility, 406
Adenosine phosphorylation and kidney, 168
Adenosine-triphosphatase and uterine motility, 406
Adrenal cortex
and diabetes, 1
of wild Norway rat, 5
Adrenalectomy and muscular fatigue, 10
Adrenal glands and epinephrine, 411
Adrenaline (*see also* Epinephrine), oscillatory flow with, 280
AIKAWA, J. K. Fluid volumes and electrolyte concentrations in normal rabbits, 695
AKMAN, L. C., 649
Altitude
decompression at high, 37
decompression injury, 452
Amphibians, iodine uptake by frog thyroid, 590
ANDERSON, N. L., 603
Androgens, protein anabolic effect, 581
Anesthetics
and brain acetylcholine, 469
and carotid-occlusion-pressor reflex, 553
and coronary blood flow, 521
and decompression injury, 452
dial-urethane and mean blood pressure, 308
sodium pentobarbital and shock, 243
Anions and chloride excretion, 668
Anoxia
and convulsions, 503
and decompression, 37
decompression injury, 452
and smooth muscle, 88
ANSLOW, W. P., Jr., 677
Antipyrine and body water, 313
Antrum, gastric secretion and resection of, 99
Apneusis and drugs, 74
Arterial pressure and carotid occlusion, 553
ATEN, A. H., Jr. AND C. B. HEYN. Secretion of radio-calcium in milk, 579
Atrial inflow and inspiration, 259
Auditory cortex, afferent connections, 489
Auricular fibrillation and shock, 219
Azide and nerve conduction, 458

BACIGALUPO, F. A., J. R. COUCH AND P. B. PEARSON. Effect of sucrose, lactose, galactose and fructose on fecal excretion of biotin, riboflavin and PGA in mature cotton rat, 131
BAEZ, S., A. MAZUR AND E. SHORR. Hepatorenal factors in circulatory homeostasis. XX: Antidiuretic action of hepatic vasodepressor, VDM (ferritin), 198
BALDWIN, D., EDNA M. KAHANA AND R. W. CLARKE. Renal excretion of sodium and potassium in the dog, 655
BALLIN, H. M., 503
BERGER, E. Y., 313
BERGER, E. Y., M. F. DUNNING, J. M. STEELE, ROSLYN JACKENTHAL AND B. B. BRODIE. Estimation of intracellular water in man, 318
BERLINER, R. W., T. J. KENNEDY, JR. AND J. G. HILTON. Renal mechanisms for excretion of potassium, 348
BERNHEIM, F., 189, 368, 375
BERRY, I. M. AND A. C. IVY. Partition hypothesis for intestinal absorption of fat, 80
BIGELOW, R. R., 99
Bile
excretion, 575
excretion of bromsulphthalein, 565
Bilirubin, excretion, 575
Biotin synthesis and carbohydrates, 131
Blocking, neuromuscular and *bis*-trimethylammonium decane and D-tubocurarine, 475
Blood
antidiuretic action of ferritin, 198
capillary permeability, 687
clotting and thyroid, 289
clotting time, 632
coronary flow and oxygen consumption, 521
and dietary levels of sodium and potassium, 182
elements of peripheral, 709
erythrocytes, 610
extracellular fluid compartments in rabbits, 695
fetal circulation, 147
glucose levels in ruminants, 434

Blood—Continued
 interatrial septal defects, 507
 plasma clotting, 293
 plasma fibrinogen, 619
 plasma and radiation syndrome, 703
 pro- and antigenadotrophic substances in
 rabbit serum, 393
 right atrial inflow and inspiration, 259
 sodium and chloride levels, 338
 thrombin and water-soluble vitamins, 665
 vitamin B₁₂-deficient diet, 714

Blood flow and adrenaline, 280

Blood pressure
 carotid occlusion and arterial pressure, 553
 determination of mean, 308
 dietary factors, 189
 effects of renin, 385
 and liver damage, 375
 and low-protein diet, 368

Blood sugar
 and body temperature, 175
 phosphate levels, 416

Body fluids, acetylcholine estimation, 616

Body temperature and blood sugar, 175

Body water
 intracellular, 318
 total in man, 313

Body weight and goldthioglucose, 428

BOHSTEDT, G., 182

BOLOMEY, A. A., 677

Bone marrow metabolism, 603

BORSON, H. J., D. SINGMAN, S. LEPKOVSKY, M. K. DIMICK, V. GASC AND R. PERRY. Hematologic changes and death in vitamin B₁₂-deficient rats, 714

Brain
 acetylcholine content and drugs, 469
 convulsions and anoxia, 503
 thromboplastin suspensions, 293

BRAUER, R. W. AND RITA L. PESSOTTI. Hepatic uptake and biliary excretion of bromsulphthalein in the dog, 565

BRECHER, G., 428

BRECHER, G. A., 259

BRECHER, G. A. AND D. F. OPDYKE. Effects of normal and abnormal respiration on hemodynamics of experimental interatrial septal defects, 507

BRECKENRIDGE, C. G., H. E. HOFF AND H. T. SMITH. Effect on respiration in midpontine animal of chemical inhibition of facilitatory system, 74

BRODIE, B. B., 313, 318

Bromide space and intracellular water, 318

Bromsulphthalein, uptake and excretion, 565

BROOKS, C. McC., 213, 219

Brunner's glands and cinchophen, 110

BURTON, A. C., 280

BYERS, S. O., 575

CALCIUM, radio-, in milk, 579

Canine pancreatic tissue, histamine content, 115

CANZANELLI, A., 421

CANZANELLI, A., RUTH GUILD AND D. RAPPOR. Phosphorylation of adenosine by kidney homogenates, 168

Capillary method for measuring clotting time, 632

Capillary permeability, 687

Captivity and adrenal gland, 5

Carbohydrates and vitamin synthesis, 131

Carbon dioxide, carbon monoxide conversion, 560

Carbon monoxide, conversion to carbon dioxide, 560

Cardiac accelerator nerves and coronary flow, 266

Cardiac activity
 and coronary blood flow, 521
 interatrial septal defects, 507

Cardiac cycle measurement, 213

Cardiac effects of vagus nerve, 545

Cardiac output (see also Heart)
 coronary flow, 266
 stroke index and diastolic time, 273

Carotid occlusion and arterial pressure, 553

Chloride
 excretion and anions, 668
 and thirst, 338

Cholesterol
 of adrenal gland, 5
 production and excretion, 575

Choline deficiency
 and hypertension, 189
 and renal hypertension, 375

CHRISTIAN, J. E., 193

Cinchophen and peptic ulcers, 110

CIZEK, L. J., 162

CIZEK, L. J. AND MARJORIE B. ZUCKER. Effect of hypoproteinemia produced by plasmapheresis on plasma and interstitial fluid volumes and renal clearances of dogs, 153

CLARK, R. T., JR. Evidence for conversion of carbon monoxide to carbon dioxide by the intact animal, 560

CLARKE, R. W., 655

Clotting time, measurement by capillary method, 632

CODE, C. F., 215
 Contraction pattern of tortoise ventricle, 249
 Convulsions and anoxia, 503
 CORCORAN, A. C., 379
 COREY, E. L. AND E. G. LEWIS. Etiology of explosive decompression injury, 452
 Coronary flow
 and nerve stimulation, 266
 and oxygen consumption, 521
 COUCH, J. R., 131
 CSAPO, A. Actomyosin formation by estrogen action, 406

DAVIS, J. E. Acetylcholine estimation in body fluids by the acetone-sensitized frog rectus muscle test, 616
 Decompression
 etiology of injury, 452
 and high altitude, 37
 DEUTSCH, H. F., W. H. McSHAN, C. A. ELY AND R. K. MEYER. Time of appearance and properties of antigonadotropic and progonadotropic substances of rabbit serum, 393
 Diabetes
 and adrenal cortex, 1
 phosphate and glucose in, 416
 Dial-urethane anesthesia and mean blood pressure, 308
 Diastolic time and stroke index, 273
 Diet
 fluid compartments and low-protein, 162
 and hypertension, 189
 potassium-deficient and electrocardiograms, 538
 renal hypertension and low-protein, 368
 sodium and potassium levels, 182
 vitamin B₁₂ and hematologic changes, 714
 DIMICK, M. K., 714
 DOLPHIN, J., 581
 DOTY, R. W. AND R. W. GERARD. Nerve conduction without increased oxygen consumption: action of azide and fluoroacetate, 458
 DOWLING, C. V., 266
 DRAGSTEDT, L. R., 99
 DRECHSLER, KATHERINE, 289, 665
 Drinking and hypertonic solutions, 326
 Drugs
 adrenaline and oscillatory flow, 280
 adrenergic-blocking and carotid-occlusionpressor reflex, 553
 and brain acetylcholine, 469
 and cardiac muscle, 213
 D-tubocurarine and *bis*-trimethylammonium decane, 475
 epinephrine, 411
 epinephrine and shock, 230
 3-orthotoloxyl-1,2-propanediol and respiration, 74
 and potassium deficiency, 538
 DRURY, D. R., 385
 DUNNING, M. F., 313, 318
 Duodenal secretion and cinchophen, 110
 DWORETZKY, M., 115
 Dye, bromsulphthalein uptake and excretion, 565
 DYE, J. A., 434

EAR
 afferent connections to cortex, 489
 oscillatory flow with adrenaline, 280
 temperature changes, 301
 ECKSTEIN, R. W., M. STROUD, III, C. V. DOWLING AND W. H. PRITCHARD. Factors influencing changes in coronary flow following sympathetic nerve stimulation, 266
 Edema and plasmapheresis, 153
 Electrical pulses and auricular fibrillation, 219
 Electrocardiograms and potassium deficiency, 538
 Electrolytes
 chloride excretion and anions, 668
 concentrations in rabbits, 695
 extracellular fluid, 677
 and mineral excretion and androgens, 581
 permeability of sodium and potassium, 610
 sodium and potassium excretion, 655
 sodium and potassium levels, 182
 sodium and sulfate transcapillary exchange rates, 687
 ELLIOTT, K. A. C., R. L. SWANK AND NORA HENDERSON. Effects of anesthetics and convulsants on acetylcholine content of brain, 469
 ELY, C. A., 393
 Environment
 temperatures and sexual development, 24
 thermal cutaneous vasomotor response, 301
 Enzymes
 effects on hormones, 289
 and inactivation of thrombin, 665
 Epinephrine (*see also* Adrenaline)
 and adrenal glands, 411
 and shock, 230
 Erythrocytes
 in peripheral blood, 709
 permeability, 610
 ESSEX, H. E., 230

Estrogens
pelvic relaxation and acetylcholine, 606
and uterine motility, 406

Eugenol and gastric mucous barrier, 120

EVERETT, N. B. AND R. J. JOHNSON. Use of radioactive phosphorus in studies of fetal circulation, 147

Exercise
and respiration, 54
and respiration in spinal dog, 64

Extracellular fluid volume and renal function, 677

EYZAGUIRRE, C., 475

F_{AT}
and body water, 313
intestinal absorption, 85

Fatigue
gastric mucosa, 120
muscular, 10

Fecal excretion and vitamin synthesis, 131

Feeding, gastric motor activity and sham, 447

Ferritin, antidiuretic action, 198

Fetal circulation and radioactive phosphorus, 147

Fibers in vagus nerve, 545

Fibrillation and shock, 219

FINE, J., 619

FLASHER, J. AND D. R. DRURY. Relationship of renin to early renal hypertension in rabbit, 385

Fluid compartments and hypoproteinemia, 162

Fluid volumes in rabbits, 695

Fluoroacetate and nerve conduction, 458

FOLTZ, E. L., R. G. PAGE, W. F. SHELDON, S. K. WONG, W. J. TUDDENHAM AND A. J. WEISS. Factors in variation and regulation of coronary blood flow in intact anesthetized dogs, 521

Food intake and goldthioglucose, 428

FRANK, E. D., H. A. FRANK AND J. FINE. Traumatic shock. XVII. Plasma fibrinogen in hemorrhagic shock in the dog, 619

FRANK, H. A., 619

FRIEDMAN, M., S. O. BYERS AND F. MICHAELIS. Observations concerning production and excretion of cholesterol in mammals. II. Excretion of bile in the rat, 575

Frog, iodine uptake by thyroid, 590

FURCHGOTT, R. F. AND E. SHORR. Effect of anoxia on contractility and metabolism of intestinal smooth muscle, 88

G_{ASC}, V., 714

Gastric juice
histamine content, 115
mucoproteins, 136

Gastric motor activity and sham feeding, 447

Gastric mucous barrier and eugenol, 120

Gastric secretion and resection of antrum, 99

Gastrointestinal tract and vitamin synthesis, 131

GELFAN, S., L. F. NIMS AND R. B. LIVINGSTON. Explosive decompression at high altitude, 37

GELLHORN, E. AND H. M. BALLIN. Further investigations on effect of anoxia on convulsions, 503

GERARD, R. W., 458

GILBERT, J. L., 213, 219

Glands
adrenal and epinephrine, 411
thyroid iodine uptake, 590

Glomerular filtration rate
extracellular fluid volume, 677
and hypoproteinemia, 162
and sodium load, 639

Glucose
and anoxic smooth muscle, 88
in diabetic rat, 416

Glycemia and development of rumen, 434

Glycolysis of maltose and ejaculated bull spermatozoa, 598

Glycosuria and adrena cortical extracts, 1

GOLDBERG, H., 243

GOLDSTEIN, M. S., 10, 175

Goldthioglucose and obesity, 428

GOLLUB, S., F. E. KAPLAN AND D. R. MERANZE. Qualitative differences between brain and lung thromboplastic suspensions, 293

Gonadotrophic, pro- and anti-, substances in serum, 393

GRAD, B. AND C. P. LEBLOND. Effect of thyroxine on oxygen consumption and heart rate following bile duct ligation and partial hepatectomy, 17

GRAY, S. W. Pattern of contraction and relaxation in tortoise ventricle, 249

GREGERSEN, M. I., 326, 338

GREIG, MARGARET E., 610

GRODINS, F. S., 54

GRODINS, F. S. AND D. P. MORGAN. Regulation of breathing during electrically-induced muscular work in anesthetized dogs following transection of spinal cord, 64

GROSSBERG, A. L., S. A. KOMAROV AND H.

SHAY. Mucoproteins of gastric juice and mucus and mechanism of their secretion, 136

GROSSMAN, M. I., 110

GRUMMER, R. H., 182

GRUNDFEST, H., 545

GRUNERT, R. R., 182

GUILD, RUTH, 168, 421

HALLENBECK, G. A., M. DWORETZKY AND C. F. CODE. Histamine content of canine pancreatic juice and pancreatic tissue, 115

HANDLER, P. AND F. BERNHEIM. Effect of choline deficiency on ACTH production and on hypertension of subtotally nephrectomized rats, 375

Influence of dietary factors on hypertension induced by choline deficiency, 189

Physiological basis for effects of low-protein diets on blood pressure of subtotally nephrectomized rat, 368

HARTIALA, K., A. C. IVY AND M. I. GROSSMAN. Effect of feeding cinchophen on secretion of juice by duodenal glands in dog, 110

Hearing, afferent fibers of middle ectosylvian area, 489

Heart

- auricular fibrillation and shock, 210
- contraction and relaxation of tortoise ventricle, 249
- coronary flow, 266
- measurement of cardiac cycle, 213
- spike potentials of vagus nerve, 545
- venous pressure and sodium excretion, 649

Heart rate

- stroke index and diastolic time, 273
- and thyroxine, 17

Hematologic changes and vitamin B₁₂, 714

HEMINGWAY, A. AND C. W. LILLEHEI. Thermal cutaneous vasoconstrictor response in dogs, 301

Hemoglobin in peripheral blood, 709

Hemorrhage

- and heart rate, 273
- shock and plasma fibrinogen, 619
- shock and sodium pentobarbital, 243

HENDERSON, NORA, 469

Heteromyids, water balance, 31

Hexosamine, gastric secretion, 136

Hexose conversion to pentose, 421

HEYN, C. B., 579

HILTON, J. G., 348

Histamine

- and pancreas, 115
- and secretion of mucoproteins, 136

HOFF, H. E., 74

HOLLAND, W. C. AND MARGARET E. GREIG. Studies on the permeability of erythrocytes. III. Effect of physostigmine and acetylcholine on permeability of dog, cat and rabbit erythrocytes to sodium and potassium, 610

HOLLANDER, F., 120

HOLMES, J. H. AND M. I. GREGERSEN. Role of sodium and chloride in thirst, 338

Observations on drinking induced by hypertonic solutions, 326

Hormone

- adrenocorticotrophic and renal hypertension, 375
- androgens, 581
- effects on enzymes, 289
- and gastric secretion, 99
- thyroid and sexual development, 24

HWANG, W., L. C. AKMAN, A. J. MILLER, E. N. SILBER, J. STAMLER AND L. N. KATZ. Effects of sustained elevation of renal venous pressure on sodium excretion in unanesthetized dog, 649

Hyperpnea, exercise, 54

Hypertension and dietary factors, 189

Hypertension, renal

- and ACTH production, 375
- and dietary proteins, 368
- and renin, 385

Hypertonic solutions

- drinking induced by, 326
- renal clearance, 639

Hypotension and epinephrine, 230

Hypothermia and blood sugar, 175

INGLE, D. J. AND J. E. NEZAMIS. Effect of stress upon glycosuria of force-fed depancreatized and of adrenalectomized-depancreatized rats, 1

INGRAHAM, R. C., H. GOLDBERG, F. ROEMHILD AND H. C. WIGGERS. Influence of sodium pentobarbital upon course of events in experimental hemorrhagic shock, 243

Injury, decompression, 452

Inpiration and atrial inflow, 259

Interatrial septal defects and respiration, 507

Intestine

- anoxia and smooth muscle, 88
- excretion, 575
- and fat, 80

Intracellular water in man, 318

Inulin and intracellular water, 318

Iodine uptake by frog thyroid, 590

Ischemia and swelling, 226
 Isotopes, radioactive and fetal circulation, 147
 IVY, A. C., 80, 110

JACKENTHAL, ROSLYN, 318
 JARCHO, L. W., C. EYZAGUIRRE, S. A. TALBOT AND J. L. LILIENTHAL, JR. Neuromuscular excitation: Responses of normal and denervated mammalian muscle to *bis*-trimethylammonium decane (C₁₀) and to D-tubocurarine, 475
 JOHNSON, R. J., 147

KAHANA, EDA M., 655
 KAPLAN, F. E., 293
 KATZ, L. N., 649
 KENNEDY, T. J., JR., 348
 Kidney (see also Renal)
 and adenosine phosphorylation, 168
 and effects of renin, 379
 excretion of potassium, 348
 renin and hypertension, 385
 sodium load, 639
 Kidney homogenates, conversion of hexose to pentose, 421
 KOCHAKIAN, C. D., JEAN G. MOE AND J. DOLPHIN. Protein anabolic effect of testosterone propionate in adrenalectomized and normal rats, 581
 KOHN, H. I. Changes in blood plasma of guinea-pig during acute radiation syndrome, 703
 KOMAROV, S. A., 136, 447

LADD, M., 677
 LARDY, H. A., 598
 LEBLOND, C. P., 17
 LEHMANN, A. L. AND R. M. REINECKE. Measurement of increase in volume of tail of mouse following ischemia, 226
 LEPKOVSKY, S., 714
 Leucocytes in peripheral blood, 709
 LEVINE, R., 10
 LEWIS, E. G., 452
 LILIENTHAL, J. L., JR., 475
 LILLEHEI, C. W., 301
 Liver
 biliary excretion of bromsulphthalein, 565
 and hemorrhagic hypotension, 619
 and thyroxine, 17
 Liver damage and hypertension, 375
 LIVINGSTON, R. B., 37

LORBER, S. H., S. A. KOMAROV AND H. SHAY. Effect of sham feeding on gastric motor activity of the dog, 447
 Lungs
 right atrial inflow and inspiration, 259
 thromboplastic suspensions, 293
 water loss, 31
 LUX, R. E. AND J. E. CHRISTIAN. Permeability of frog skin by means of radioactive tracers, 193

MAISON, G. L., 553
 Maltose, ejaculated bull spermatozoa and glycolysis of, 598
 Mammalian tissue, conversion of hexose to pentose, 421
 MAQSOOD, M. AND E. P. REINEKE. Influence of environmental temperatures and thyroid status on sexual development in male mouse, 23
 MARVIN, H. N., W. J. WINGO AND N. L. ANDERSON. Effect of thyroidectomy and thiouracil administration upon metabolism of pigeon bone marrow, 603
 MASSON, G. M. C., A. C. CORCORAN AND I. H. PAGE. Some effects of chronic treatment of rats with renin, 379
 MATTHEWS, S. A. Effect of thiouracil on uptake of radioactive iodine by thyroid gland of summer frogs (*Rana pipiens*), 590
 MAZUR, A., 198
 McCANDLESS, ESTHER L. AND J. A. DYE. Physiological changes in intermediary metabolism of various species of ruminants incident to functional development of rumen, 434
 McSHAN, W. H., 393
 Medulla and respiration, 74
 MERANZE, D. R., 293
 Metabolism
 bone marrow respiratory, 603
 and nerve conduction, 458
 of carbohydrates and diabetes, 416
 of ejaculated bull spermatozoa, 598
 of ruminants, 434
 of smooth muscle, 88
 MEYER, J. H., R. R. GRUNERT, MARIE T. ZEPPLIN, R. H. GRUMMER, G. BOHSTEDT AND P. H. PHILLIPS. Effect of dietary levels of sodium and potassium on growth and on concentrations in blood plasma and tissues of white rat, 182
 MEYER, R. K., 393
 MICHAELIS, F., 575
 MIDDLETON, H. H., 545

MIDDLETON, S., H. H. MIDDLETON AND H. GRUNDFEST. Spike potentials and cardiac effects of mammalian vagus nerve, 545

Milk, radio-calcium, 579

MILLER, A. J., 649

Mineral oil, intestinal absorption of emulsified, 80

MOE, JEAN G., 581

MORGAN, D. P., 64

MORGAN, D. P. AND F. S. GRODINS. Regulation of breathing during electrically-induced muscular work in the intact anesthetized dog, 54

MORITA, Y. AND J. M. ORTEN. Effect of phosphate upon utilization of glucose by alloxan diabetic rat, 416

Mucoproteins of gastric juice, 136

Mucus, gastric mucous barrier, 120

Muscle

- anoxic smooth, 88
- excitability of cardiac, 213
- and fatigue, 10

Muscle excitation and *bis*-trimethylammonium decane and α -tubocurarine, 475

Muscle, rectus, response to acetylcholine, 616

Muscular work

- respiration during electrically-induced, 54, 64

Myanesin and respiration, 74

NERVE conduction and oxygen consumption, 458

Nerve stimulation and coronary flow, 266

Neurogenic factors and thermoglycemic responses, 175

Neuromuscular block by *bis*-trimethylammonium decane, 475

NEZAMIS, J. E., 1

NICHOL, J. T. AND A. C. BURTON. Effects of adrenaline on flow in isolated perfused rabbit's ear, 280

NICHOLS, JOHN. Effects of captivity on adrenal gland of wild Norway rat, 5

NIMS, L. F., 37

Nucleosides, phosphorylation by homogenates, 168

OBESITY and goldthioglucose, 428

Oliguria and hepatic vasodepressor, 198

OPDYKE, D. F., 507

OPDYKE, D. F., H. F. VAN NOATE AND G. A. BRECHER. Further evidence that inspiration increases right atrial inflow, 259

ORIAS, O., 213

ORIAS, O., J. L. GILBERT, A. A. SIEBENS, E. E. SUCKLING AND C. McC. BROOKS. Effectiveness of single rectangular electrical pulses of known duration and strength in evoking auricular fibrillation, 219

ORTEN, J. M., 416

Ovaries, uterine motility, 406

Oxidation, carbon monoxide to carbon dioxide, 560

Oxygen consumption

- and coronary blood flow, 521
- and nerve conduction, 458
- and thyroxine, 17

PAGE, I. M., 379

PAGE, R. G., 521

Pancreas, histamine content, 115

Partition hypothesis and fat absorption, 80

PEARSON, P. B., 131

Pelvic relaxation and acetylcholine, 606

Pentose, conversion of hexose to, 421

Permeability of frog skin and tracers, 193

PERRY, R., 714

PESSOTTI, RITA L., 565

PGA synthesis and carbohydrates, 131

PHILLIPS, P. H., 182

Phosphate in diabetic rat, 416

Phosphorus, radioactive and fetal circulation, 147

Phosphorylation and kidney homogenates, 168

Physostigmine, effect on permeability of erythrocytes, 610

PICHOTKA, J. AND H. REICHEL. Blood-clotting time in rabbits and its variations determined with a simple capillary method, 632

Pituitary gland, gonadotrophic substances of serum, 393

Plasma, lung and brain thromboplastic suspensions, 293

Plasma levels and radiation syndrome, 703

Plasmapheresis

- and fluid compartments, 162
- and renal clearance, 153

Plasma volume and hypoproteinemia, 153

PLAUT, G. W. E. AND H. A. LARDY. Metabolism of ejaculated bull spermatozoa with particular reference to the glycolysis of maltose, 598

POST, R. S., 639

Potassium

- renal excretion, 655
- and renal mechanisms, 348
- and sodium levels, 182

Potassium deficiency and electrocardiograms, 538

PRITCHARD, W. H., 266

PROCHNIK, G., G. L. MAISON AND J. W. STUTZMAN. Carotid-occlusion-pressor reflex: Influence of existing mean arterial pressure, of anesthetics and of ganglionic- and adrenergic-blocking drugs, 553

Protein anabolic effect of androgens, 581

Protein intake
and fluid compartments, 162
and plasmapheresis, 153

Proteins, renal toxic activity, 379

Pulmonary water loss in desert rodents, 31

R
ADIATION, x-rays and blood plasma levels, 703

Radioactive phosphorus and fetal circulation, 147

Radioactive tracers and permeability of frog skin, 193

Radioactivity
iodine uptake by frog thyroid, 590
radio-calcium in milk, 579

Radioactivity of C¹⁴ as measurement of carbon monoxide, 560

RAISZ, L. G., 677

RAMEY, E., M. S. GOLDSTEIN AND R. LEVINE. Mechanism of muscular fatigue in adrenalectomized animals, 10

RAPOPORT, S. AND C. D. WEST. Ionic antagonism: Effect of various anions on chloride excretion during osmotic diuresis in the dog, 668

RAPPORTE, D., 168

RAPPORTE, D., A. CANZANELLI AND RUTH GUILD. Conversion of hexose to pentose by mammalian tissue, 421

REICHEL, H., 632

REINECKE, R. M., 226

REINEKE, E. P., 24

Relaxation pattern of tortoise ventricle, 249

REMINGTON, J. W. Relation between length of diastole and stroke index in intact dog, 273

Renal (*see also* Kidney)

Renal clearance
and hypoproteinemia, 153
sodium, 639

Renal electrolyte control, anions and chloride excretion, 668

Renal excretion of sodium and potassium, 655

Renal hypertension (*see* Hypertension)

Renal mechanisms and potassium, 348

Renal plasma flow and extracellular fluid volume, 677

Renal venous pressure and sodium excretion, 649

Renin
effects of, 379
and renal hypertension, 385

Respiration
carbon monoxide to carbon dioxide, 560
and drugs, 74
and exercise in intact dog, 54
and exercise in spinal dog, 64
and explosive decompression, 37
and interatrial septal defects, 507
right atrial inflow and inspiration, 259

Respiratory metabolism of bone marrow, 603

Riboflavin synthesis and carbohydrates, 131

RODBARD, S. AND M. S. GOLDSTEIN. Neurogenic control of blood sugar elicited by induced variations in the body temperature of the chick, 175

Rodents, water loss in desert, 31

ROEMHILD, F., 243

ROOT, MARY A. Mean blood pressure of cats under dial-urethane anesthesia, 308

Rumen, metabolism and development of, 434

Ruminants, metabolism, 434

RYDER, H. W., 709

S
ALT intake and thirst, 326

SCHMIDT-NIELSEN, B. AND K. SCHMIDT-NIELSEN. Pulmonary water loss in desert rodents, 31

SCHMIDT-NIELSEN, K., 31

SELKURT, E. E. AND R. S. POST. Renal clearance of sodium in dog: Effect of increasing sodium load on reabsorptive mechanism, 639

Serum, anti- and progonadotrophic substances, 393

Sex and mean blood pressure, 308

Sexual development and environmental temperatures, 24

Sham feeding and gastric motor activity, 447

SHAY, H., 136, 447

SHEATZ, G. C., AND W. S. WILDE. Transcapillary exchange rate and volume of distribution of sulfate and sodium as indicated by S³⁵O₄ and Na²⁴ in the rat, 687

SHELDON, W. F., 521

Shock
anoxia and convulsions, 503
and auricular fibrillation, 219
and epinephrine, 230
plasma fibrinogen, 619
sodium pentobarbital and hemorrhagic, 243

SHORR, E., 88, 108

SIEBENS, A. A., 213, 219

SILBER, E. N., 649

SINGMAN, D., 714
 Skin, tracers and permeability of frog skin, 193
 SMITH, H. T., 74
 SOBER, H. A., F. HOLLANDER AND B. P. SONNENBLICK. Response of gastric mucous barrier in pouch dogs to repeated topical application of eugenol, 120
 Sodium
 and potassium levels, 182
 renal excretion, 655
 and thirst, 338
 Sodium excretion and venous pressure, 649
 Sodium load and renal clearance, 639
 Sodium pentobarbital and hemorrhagic shock, 243
 SONNENBLICK, B. P., 120
 Sound and afferent connections of auditory cortex, 489
 Spermatozoa metabolism of ejaculated bull, 598
 Spinal cord, respiration and transection of, 64
 STAMLER, J., 649
 STEELE, J. M., 318
 STEELE, J. M., E. Y. BERGER, M. F. DUNNING AND B. B. BRODIE. Total body water in man, 313
 Stomach
 antrum and gastric secretion, 99
 duodenal secretion, 110
 gastric mucous secretion, 120
 sham feeding and gastric motor activity, 447
 Stress and glycosuria, 1
 Stroke index and diastolic time, 273
 STROUD, M., III, 266
 STURKIE, P. D. Abnormal electrocardiograms of chickens produced by potassium deficiency and effects of certain drugs on the abnormalities, 538
 STUTZMAN, J. W., 553
 SUCKLING, E. E., 219
 SUCKLING, E. E., C. McC. BROOKS, O. ORIAS, J. L. GILBERT AND A. A. SIEBENS. Determination of excitability of mammalian heart at intervals throughout cardiac cycle, 213
 Sugar, metabolism of bull spermatozoa, 598
 Sulfate, transcapillary exchange rates, 687
 SWANK, R. L., 469
 Swelling and ischemia, 226
 Syndrome, radiation, blood plasma, 703

T
 ALBOT, S. A., 475
 Temperatures, sexual development and environmental, 24

Temperature of body
 and blood sugar, 175
 vasomotor response, 301
 Testosterone propionate, protein anabolic effect, 581
 Thermal regulation, cutaneous vasomotor response, 301
 Thiouracil
 bone marrow metabolism, 603
 iodine uptake by frog thyroid, 590
 Thirst
 and hypertonic solutions, 326
 role of sodium and chloride, 338
 Thrombin and water-soluble vitamins, 665
 Thyroid
 iodine uptake by frog, 590
 respiratory metabolism of bone marrow, 603
 and sexual development, 24
 and thrombin inactivation, 289
 Thyroxine and the liver, 17
 Tissues and dietary levels of sodium and potassium, 182
 TOMPKINS, D., 162
 Tortoise, ventricle contraction and relaxation, 249
 Toxicity, kidney proteins, 379
 Tracers, radioactive and permeability of frog skin, 193
 TREON, J. F., AND H. W. RYDER. Numbers of erythrocytes, leucocytes and types of leucocytes, and content of hemoglobin in peripheral blood of female rabbits, 709
 TUDDENHAM, W. J., 521
 TUNTURI, A. R. Physiological determination of the arrangement of the afferent connections to the middle ectosylvian auditory area in the dog, 489

U
 LCERS, peptic and cinchophen, 110
 Urinary excretion and anions, 668
 Urine, potassium excretion, 348
 Uronic acid, gastric secretion, 136
 Uterine motility and estrogen, 406

V
 AGUS nerve fibers, 545
 VAN ARMAN, C. G. Factors affecting epinephrine content of adrenal glands, 411
 VAN NOATE, H. F., 259
 Venous pressure and sodium excretion, 649
 Ventilatory response
 and exercise in intact dog, 54
 and exercise in spinal dog, 64
 Ventricle of tortoise, contraction and relaxation, 249

VIGRAN, I. M. AND H. E. ESSEX. Studies on physiologic effects of large doses of epinephrine, 230
Vitamin B₁₂ and hematologic changes, 714
Vitamins, thrombin and water-soluble, 665
Vitamin synthesis and carbohydrates, 131
Volume of mouse's tail following ischemia, 226

WATER

drinking induced by hypertonic solutions, 326
intracellular, 318
total body, 313
Water balance, pulmonary, 31
Water excretion and extracellular fluid volume, 677
Water metabolism and ferritin, 198
Water-soluble vitamins and enzymatic inactivation of thrombin, 665
WAXLER, S. H. AND G. BRECHER. Obesity and food requirements in albino mice following administration of goldthioglucose, 428
WEBER, G. AND KATHERINE DRECHSLER.
Effect of thyroidectomy on serum lipase and thrombin inactivation in rabbits, 289
Effect of water-soluble vitamins on thrombin and on enzymatic inactivation of thrombin, 665
Weight and mean blood pressure, 308
WEISS, A. J., 521
WESSON, L. G., JR., W. P. ANSLOW, JR., L. G.

RAISZ, A. A. BOLOMEY AND M. LADD. Effect of sustained expansion of extracellular fluid volume upon filtration rate, renal plasma flow and electrolyte and water excretion in the dog, 677

WEST, C. D., 668
WIGGERS, H. C., 243
Wild Norway rat, effects of captivity on adrenal gland, 5
WILDE, W. S., 687
WINGO, W. J., 603
WONG, S. K., 521
WOODWARD, E. R., R. R. BIGELOW AND L. R. DRAGSTEDT. Effect of resection of antrum of stomach on gastric secretion in Pavlov pouch dogs, 99
Work performance and adrenalectomy, 10

YOUNG

YOUNG, W. C., 606
YOUNG, W. C. AND F. E. EMERY. Relaxation of pelvic ligaments in guinea-pigs by acetylcholine, 606

ZEPPLIN

ZEPPLIN, MARIE T., 182
ZUCKER, MARJORIE B., 153
ZUCKER, MARJORIE B., L. J. CIZEK AND D. TOMPKINS. Effect of low-protein diet and plasmapheresis on fluid compartments and glomerular filtration rate in dogs, 162

